LABORATORY

OF THE

INLAND REVENUE DEPARTMENT,

OTTAWA, CANADA.

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BULLETIN No. 82.

UNFERMENTED GRAPE JUICE.

be in all cases acknowledged), and in certain others they should not be allowed in any circumstances.

'In the case of those articles in which they are allowed, a limit should be agreed on of those preservatives which are generally considered to be harmless, and official methods should be published for their estimation.

'In the case of those articles which can be readily made and sold without any addition of preservatives, I consider that they ought to be preserved by sterilization alone.'

The last paragraph applies in the present case, for the results now reported prove that unfermented grape juice can be made and kept for sale without any addition of preservatives.

As to whether salicylic acid may now be legally used as a preservative, this appears to be forbidden by section 2 (e) (6) of the Adulteration Act, which provides that food shall be considered adulterated if it contains any ingredient which may render it injurious to the health of the person consuming it. It would, however, be a difficult matter to prove the injurious character of small admixtures of salicylic acid, and authorities are divided in opinion on the subject. By section 17, as amended, salicylic acid is mentioned (in the first schedule of the Adulteration Act) among those substances which, if added to alcoholic, fermented or other potable liquors, would cause them to be regarded as injurious to health. Since unfermented grape juice may reasonably be included among 'other potable liquors,' it is thus evident that the addition of salicylic acid is contrary to law.

I have the honour to be, sir,
Your obedient servant,

THOS. MACFARLANE,
Chief Analyst.

Results of Analysis of Eighteen Samples of Unfermented Wines

Date of Collection.		Name and Address of Vendor.	Name and Address of Manufacturer or Furnisher.	No. of Sample.
1902.				
July	31	G. E. Hughes, Charlottetown, P.E.I.	Welch Grape Juice Co.	4307
"	31	J. G. Jamieson, Charlottetown, P.E.I.	" "	4316
Aug.	7	Methodist Bookroom, Halifax, N.S.	Hagar Bros., Welland, Ont.	20233
"	7	Brown & Webb, Halifax, N.S.	Welch Grape Juice Co., Westfield, N.Y.	20234
July	23	E. Clinton Brown, St. John, N.B.	Hagar Bros., Welland, Ont.	17847
"	25	C. P. Clarke, St. John, N.B.	Welch Grape Juice Co., Westfield, N.Y.	17849
"	23	G. Dupuis, St. John, Que.	The Ontario Grape Growing and Wine Manufacturing Co., St. Catharines.	23335
"	24	F. Poitras, St. Hyacinthe	S. Ernest Maranda, St. Hyacinthe	23336
"	22	J. T. Lyon, Bleury St. Montreal	Welch Grape Juice Co., Westfield, N.Y.	21224
"	25	M. McMillan, Brockville, Ont.	Turner & Co., Toronto	21233
"	25	J. A. Johnston, Brockville, Ont.	F. A. Lytle & Co., Toronto	21235
"	31	Hagar Bros., Welland	Hagar Bros., Welland	21237
Aug.	1	Michie & Co., King St., Toronto	F. A. Breck, Vineland, N.Y.	21240
July	23	D. Rush, Wingham, Ont.	Turner & Co., Toronto	22039
"	23	B. B. Gunn, Seaforth, Ont.	Chautauqua Fruit Co., Ripely, N.Y.	22041
"	31	McNab & Roberts, Winnipeg, Man.	J. J. McLaughlin, Toronto	17424
"	31	McDowell Watson Co., Vancouver	Tokay Wine Co., Gennesse, N.Y.	21679
"	31	" "	K. Campbell, Montreal	21683

(Grape Juice) examined specially for Alcohol and for Antiseptics.

Acidity; Grammes per 100 Cc.			Density of		Alcohol p. c. by weight.	Antiseptic Found.	Remarks.
Total as Tartaric Acid.	Fixed as Tartaric Acid.	Volatile as Acetic.	The Wine.	Distillate to Equal Volume.			
0·600	0·330	0·288	.....	0·9998	Trace....	None	Genuine.
0·615	0·600	0·012	... .	0·9998	Trace.. ..	None	"
0·405	0·150	0·204	....	0·9999	Trace....	None	"
0·900	0·150	0·600	.... ..	0·9998	Trace.....	None	"
0·495	0·060	0·348	....	1·0000	None.....	None	"
0·705	0·690	0·012	.. ..	0·9998	Trace.....	Salicylic acid..	Contains salicylic acid.
0·720	....	....	....	0·9841	10·00	....	Samples of Canadian wines collected by mistake.
0·540	....	.....	.. ..	0·9787	14·18	....	
0·825	0·555	0·216	... .	0·9998	Trace....	None	Genuine.
0·720	0·555	0·132	....	0·9973	1·50	Salicylic acid..	Contains salicylic acid.
0·645	0·465	0·144	... .	0·9975	1·37	" .	"
0·375	0·375	None. ...	1·1008	0·9998	Trace.....	None	Genuine.
0·525	0·525	None. ...	.. ..	0·9998	Trace. ...	None	"
0·780	0·540	0·192	.....	0·9984	0·84	Salicylic acid..	Contains salicylic acid.
0·420	0·345	0·060	1·0792	0·9997	Trace.....	None	Genuine.
0·990	0·165	0·660	1·0971	1·0000	None.....	Salicylic acid..	Contains salicylic acid.
0·630	None. ...	0·504	1·1227	0·9980	1·06	" .	"
0·600	None.....	0·450	1·1136	0·9844	9·79	" .	Is a fermented wine.